

CLAIMS

What is claimed is:

- 5 1. An organic electronic device, comprising:
a lower electrode layer;
a precipitation agent layer disposed over said lower
electrode layer; and
an organic layer, said organic layer composed of a dried
10 film resulting from the drying of organic material deposited
upon said precipitation agent layer, said dried film having a
substantially flat and uniform profile.
- 15 2. A device according to claim 1 wherein said organic
layer is a conducting polymer layer.
- 20 3. A device according to claim 1 wherein said
precipitation agent is spin-coated onto said lower electrode
layer.
4. A device according to claim 1 further comprising:
a photo-resist layer, said photo-resist layer fabricated
above said lower electrode layer, said photo-resist layer

patterned into a plurality of banks to define pockets upon said lower electrode layer.

5 5. A device according to claim 2 wherein said organic electronic device is an OLED device.

6. A device according to claim 5 wherein said lower electrode layer functions as an anode.

10 7. A device according to claim 6 further comprising an emissive layer, said emissive layer fabricated over said conducting polymer layer, said emissive layer emitting light upon charge recombination.

15 8. A device according to claim 7 further comprising a cathode layer disposed over said emissive layer.

9. A device according to claim 4 wherein said precipitation agent is printed onto said lower electrode layer within said pockets.

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10. A device according to claim 4 wherein said organic material is deposited by printing.

11. A device according to claim 1 wherein said precipitation agent is at least one of dioxane, propylene carbonate, and benzyl alcohol.

5 12. A device according to claim 1 wherein said device is an organic transistor.

13. A device according to claim 1 wherein said device is an organic solar cell.

10 14. A method of fabricating an organic electronic device, said method comprising:

patterning a lower electrode layer upon a substrate, said lower electrode layer having a top exposed surface;

15 depositing a precipitation agent upon said lower electrode layer; and

depositing an organic material upon said precipitation agent, said organic material drying into an organic layer, said organic layer having a substantially flat and uniform profile.

20 15. A method according to claim 14 wherein said precipitation agent is deposited by spin coating.

16. A method according to claim 14 wherein said organic electronic device is an organic light emitting diode (OLED) display.

5 17. A method according to claim 16 wherein said lower electrode layer functions as an anode.

18. A method according to claim 17 wherein said organic layer is a conducting polymer layer.

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19. A method according to claim 18 further comprising: fabricating an emissive layer above said conducting polymer layer, said emissive layer emitting light upon charge recombination.

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20. A method according to claim 19 further comprising: fabricating a photo-resist layer upon said lower electrode layer, said photo-resist layer patterned into a plurality of banks to define pockets upon said lower electrode layer.

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21. A method according to claim 20 wherein said precipitation agent is printed into said pockets.

22. A method according to claim 20 wherein said organic material is deposited by printing.

23. A method according to claim 14 wherein said device is
5 an organic transistor.

24. A method according to claim 14 wherein said device is an organic solar cell.

10 25. A method according to claim 14 wherein said precipitation agent includes at least one of dioxane, propylene carbonate, and benzyl alcohol.

26. A device according to claim 1 wherein said
15 precipitation agent includes at least one of dioxane, propylene carbonate, and benzyl alcohol.

27. A method according to claim 14 wherein said precipitation agent includes a dicationic salt.

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28. A device according to claim 1 wherein said precipitation agent includes a dicationic salt.